

Applications

SM-100 is a 0.3Cr-1.7Ni-0.25Mo-alloyed, bare, solid wire for the GMAW of high strength steels with low-temperature impact toughness requirements.

Characteristics on Usage

Characteristic features include excellent start properties, trouble-free feeding at high wire speeds and lengthy feed distances, a very stable arc at high welding currents, extremely low levels of spatter, low fume emission, reduced contact tip wear and improved protection against corrosion of the wire.

Notes on Usage

- ① Use with 100%Ar or Ar+2~20%CO₂ gas.
- ② Flow quantity of shielding gas should be 25ℓ /min. approximately.
- ③ Use the wind-screen against wind.

Shielding Gas

Ar + CO₂ (M21)

Current

Pulse

Typical Chemical Composition of Wire (%)

C	Si	Mn	P	S	Cr	Ni	Mo	V	Fe
0.081	0.48	1.76	0.014	0.012	0.28	1.76	0.23	0.09	Rem.

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)
670 (97,300)	800 (116,000)	17.2	-20 (-4) -40 (-40)	42 (31) 40 (30)

Approval

I Packing (Including Ball Pac)

Dia. (mm)	1.0	1.2	Spool(kg)	5	12.5	15
(in)	.039	.045	(lbs)	11	28	33

Sizes Available and Recommended Currents (Amp.)

Size mm (in)	1.2 (.045)
F & HF	170 ~ 270